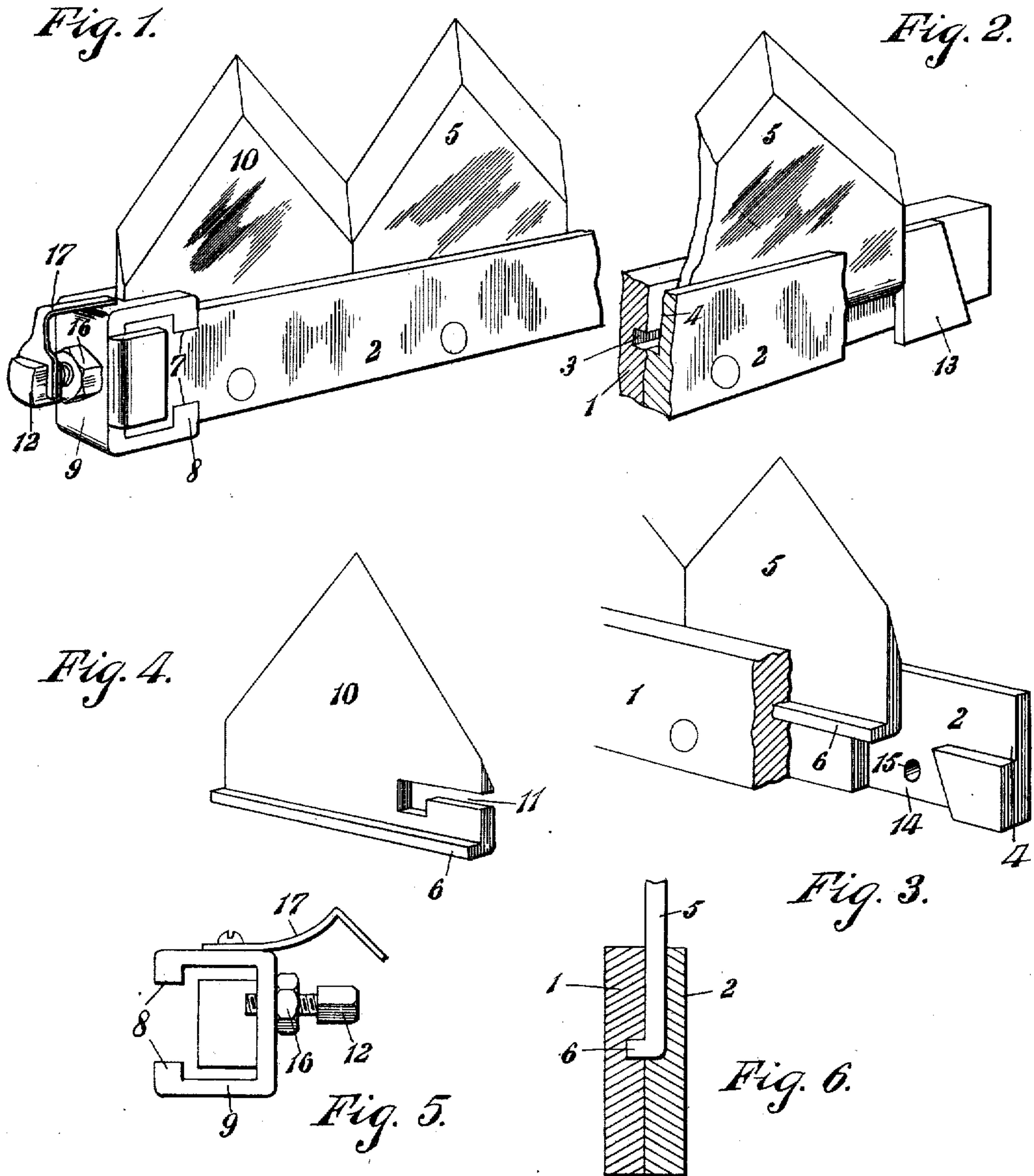


No. 829,654.

PATENTED AUG. 28, 1906.

R. G. KIDD.
CUTTER BAR ATTACHMENT.
APPLICATION FILED MAR. 1, 1906.



Witnesses

Stuart W. Allen

William C. Armstrong

Inventor

Richard G. Kidd

By *Frank B. Johnston*

UNITED STATES PATENT OFFICE.

RICHARD GILBERT KIDD, OF BISHOP'S CROSSING, CANADA.

CUTTER-BAR ATTACHMENT.

No. 829,654.

Specification of Letters Patent.

Patented Aug. 28, 1906.

Application filed March 1, 1906. Serial No. 303,586.

To all whom it may concern:

Be it known that I, RICHARD GILBERT KIDD, of the village of Bishop's Crossing, county of Wolfe, Province of Quebec, and Dominion of Canada, have invented certain new and useful Improvements in Cutter-Bar Attachments, of which the following is a full, clear, and exact description.

My invention relates to cutter-bars for mowing or harvesting machines.

In machines of this class the knife-bar containing the cutter-knives reciprocates within the cutter-bar. The knife-sections are usually attached to the knife-bar by means of rivets. The knife-sections at the center of the bar wear out very rapidly and are frequently broken. To replace them, it is necessary to punch out the rivets and rivet in the new sections, which operation requires considerable time. Furthermore, the rivet-holes weaken the knife-bar, so that it often breaks.

The object of my invention is to provide means whereby the knife-sections may be quickly and easily inserted in the knife-bar and held securely in place without the use of rivets.

The device consists of a knife-bar made in two parts so formed that when riveted together they inclose an L-shaped slot or channel for the reception of the knife-sections. The knife-sections are provided with integral heels or flanges adapted to fit in the L-shaped channel. Locking means are provided at one or both ends of the cutter-bar, whereby the knife-sections may be removed at will or locked in position and tightened in the knife-bar.

In the drawings, which illustrate my invention, Figure 1 is a perspective view of one end of the knife-bar, showing the locking member in position. Fig. 2 is a perspective view of the opposite end of the bar, showing a means of fastening the teeth in position. Fig. 3 is a perspective view of the opposite side of the bar shown in Fig. 2. Fig. 4 is a perspective view of the end locking section. Fig. 5 is a plan view of the locking member. Fig. 6 is a transverse section through the bar.

Referring to the parts, 1 designates the body member of the knife-bar, and 2 its complementary member. The member 1 is provided with a shallow longitudinal groove 3, and the member 2 is provided with a rectangular groove 4. When the members 1 and 2 are riveted together, as shown, the grooves 3

and 4 form an L-shaped slot adapted to receive the cutter-sections 5. Each of the sections is provided with a heel or flange 6 at right angles to the body of the section, said flange being adapted to fit into the groove 3, while the body of the section fills up the groove 4, as seen in Fig. 6.

The knife-bar may be provided at each end with adjustable fastening means for the sections in order that the latter may be removed from either end of the bar or may be solid at one end and provided with adjustable fastening means at the other.

In the preferred form of the device, as shown in Figs. 1 and 2, one end of the bar is provided with a pair of transverse slots 7, adapted to receive the heels 8 of the locking member 9. The toothed end adjacent the locking member is provided with an L-shaped slot 11, which is engaged by the locking member 9. The portion of the slot 11 occupied by the heels 8 is enlarged to allow the toothed end to slide longitudinally when pressed by the set-screw 12. A jam-nut 16 on the set-screw 12 is adapted to lock the set-screw in position, while a further locking device 17, consisting of a spring-spanner, is attached to the member 9 and is adapted to engage the set-screw 12 after the knife-sections have been forced into position.

The opposite end of the knife-bar (shown in Figs. 2 and 3) is adapted to receive a wedge 13 for the purpose of tightening the knife-sections. The wedge 13 slides in a taper-slot 14 in the member 2 and is locked in position by means of a set-screw passing through the aperture 15.

The operation of the device consists in placing the wedge in the position shown in Fig. 2 and then sliding the sections 5 into the bar from the opposite end. When the sections are in position, the locking member 9 is clamped to the knife-bar and the sections tightened by means of the set-screw 12 and the wedge 13. The sections can be removed from the outer end of the bar by withdrawing the wedge 13 and sliding the sections outwardly, or they can be removed from the inner end of the bar by removing the clamping member 9 and sliding the sections from the inner end of the bar.

Instead of using a wedge 13 at the outer end of the knife-bar the bar may be made solid and the sections all removed from the opposite end. It will also be obvious that the wedge 13 may be substituted for the

clamping member 9 at the inner end of the cutter-bar or any other suitable locking mechanism used.

5 The rapidity and ease with which knife-sections may be inserted or removed from the knife-bar will be apparent to those skilled in the use of machines of this class. The additional strength and rigidity given to the knife-bar will also be obvious.

10 Having thus described my invention so that the same may be readily understood by those skilled in the art to which it appertains, what I claim, and desire to secure by Letters Patent, is—

15 In a device of the class described, a knife-bar comprising two members rigidly attached together and inclosing an L-shaped channel,

a plurality of knife-sections having integral flanges adapted to fit within said channel, a wedge adjustably secured to one end of said 20 knife-bar, a transverse slot formed in the opposite end of said knife-bar and in the end knife-section, a removable clamping member attached to said knife-bar and adapted to engage in said transverse slot, and means se- 25 cured to said clamping member for tightening said knife-sections in position.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

RICHARD GILBERT KIDD.

Witnesses:

H. G. LAWRENCE,
A. JONAS.